

IN THE CLAIMS:

1. (Currently Amended) A fluid coupling assembly for retaining a sealed joint, comprising:

a first member adapted to be connected to a first fluid conduit and having a first sealing surface, a radially projecting series of serrations and a first fastening configuration; and

a second member adapted to be connected to a second fluid conduit, a second fastening configuration and enabling a second sealing surface to engage the first sealing surface,

the second member has a plurality of annularly spaced axially cantilevered beams, each beam having at least one tooth of a configuration to engage the series of serrations, an operative engagement of the tooth and serrations enables a relative low force rotation during a sealing engagement of the first sealing surface and the second sealing surface and a relatively higher force resistance to rotation during disengagement the axially spaced cantilevered beams are spaced to position respective distal ends of the cantilevered beams to enable a visual conformation of engagement of an alignment of a tooth and the annular serrations between the spacing of the cantilevered beams.

2. (Original) The fluid coupling assembly of Claim 1 wherein each cantilevered beam has a curvilinear cross section traverse to an axial direction.

3. (Original) The fluid coupling assembly of Claim 2 wherein the cantilevered beams are spaced in an annular pattern with a pair of teeth provided at an axially distal side end of each cantilevered beam.

4. (Original) The fluid coupling assembly of Claim 1 wherein the serrations are annularly arranged in a circular pattern about the first member and the axially cantilevered beams have inner and outer diameters that subscribe concentric circles and at least one tooth member on each cantilevered beam projects radially inward from each cantilevered beam inner diameter to
5 engage the circular serrations in a ratcheting manner as the respective teeth undulate over the circular serrations during sealing engagement and disengagement modes of operation.

5. (Original) The fluid coupling assembly of Claim 4 wherein a pair of spaced teeth project radially inward from each cantilevered beam.

6. (Original) The fluid coupling assembly of Claim 4 wherein the circular serrations
10 are formed by truncated teeth with annular axially tapered surfaces and transverse engagement surfaces of different angular dimensions.

7. (Original) The fluid coupling assembly of Claim 4 wherein the cantilevered beam teeth and the circular serrations have the angular dimensions for the engagement surfaces wherein an equal resistance force is provided for both coupling and de-coupling.

8. (Original) The fluid coupling assembly of Claim 7 wherein 3 spaced teeth project
15 radially inward from each cantilevered beam.

9. (Original) The fluid coupling assembly of Claim 1 wherein axial leading surfaces of the serration are chamfered.

10. (Original) The fluid coupling assembly of Claim 1 wherein the location of the tooth and the serrations are to align at their axially leading transverse surfaces when the first member and second member are operatively coupled.

11. (Currently Amended) A fluid coupling assembly for retaining a sealed joint,
5 comprising:

a first member adapted to be connected to a first fluid conduit and having a first sealing surface, a series of serrations and a first fastening configuration; and

a second member adapted to be connected to a second fluid conduit, a second fastening configuration and enabling a second sealing surface to engage the first sealing surface,

10 the second member has a plurality of axially cantilevered beams, each beam having a plurality of teeth of a configuration to engage the series of serrations and spaced offset from an axis of the first and second fluid conduit wherever the initial and final operative engaging contact of the teeth and serrations is directly between an entrance of the teeth into the serrations and axially aligned surfaces of the serrations, an operative engagement of the teeth and
15 serrations enables a resistance force rotation during a sealing engagement of the first sealing surface and the second sealing surface and a resistance force rotation during disengagement, the plurality of teeth and serrations remaining in contact with each other when a pre-determined sealing force is reached between the first member and the second member.

12. (Original) The fluid coupling assembly of Claim 11 wherein each cantilevered
20 beam has a curvilinear cross section traverse to an axial direction.

13. (Original) The fluid coupling assembly of Claim 12 wherein the cantilevered beams are spaced in an annular pattern with a plurality of teeth provided at an axially distal side end of each cantilevered beam.

14. (Original) The fluid coupling assembly of Claim 13 wherein the serrations are annularly arranged in a circular pattern about the first member and the axially cantilevered beams have inner and outer diameters that subscribe concentric circles and each tooth member on each cantilevered beam projects radially inward from each cantilevered beam inner diameter to engage the circular serrations in a ratcheting manner as the respective teeth undulate over the circular serrations during sealing engagement and disengagement modes of operation.

15. (Original) The fluid coupling assembly of Claim 14 wherein the resistance force is the same during the sealing engagement and sealing disengagement.

16. (Currently Amended) A fluid coupling assembly for retaining a sealed joint, comprising:

a first member adapted to be connected to a first fluid conduit and having a first sealing surface, a series of axially aligned raised serrations and a first fastening configuration; and

a second member adapted to be connected to a second fluid conduit, a second fastening configuration and enabling a second sealing surface to engage the first sealing surface,

the second member includes a hollow cylindrical collar with spaced axial notches forming a plurality of axially cantilevered beams, wherein each cantilevered beam has a curvilinear cross section traverse to an axial direction, each beam having a plurality of teeth of a configuration to engage the series of serrations, an operative engagement of the teeth and

serrations enables a resistance force rotation during a sealing engagement of the first sealing surface and the second sealing surface and a resistance force rotation during disengagement, the plurality of teeth and serrations remaining in contact with each other when a pre-determined sealing force is reached between the first member and the second member.

5 17. (Original) The fluid coupling assembly of Claim 16 wherein one of the serrations and teeth have transverse engagement surfaces of different angular dimensions during a sealing engagement and disengagement to provide a lower force during engagement and a higher force during engagement.

10 18. (Currently Amended) The fluid coupling of Claim 16 wherein the axially aligned serrations are annularly arranged in a circular pattern about the first member and the axially cantilevered beams have inner and outer diameters that subscribe concentric circles and each tooth member on each cantilevered beam projects radially inward from each cantilevered beam inner diameter to engage the circular serrations in a ratcheting manner as the respective teeth undulate over the circular serrations during sealing engagement and disengagement modes of
15 operation whereas the cylindrical collar contacts the first member only when the respective tooth members and circular serrations engage in an initial and final engaging contact directly between an entrance to the serrations and a surface of the axially aligned raised serrations.